

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 09/889,330  
Source: 1FW16  
Date Processed by STIC: 1/14/05

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 01/14/2005

PATENT APPLICATION: US/09/889,330

TIME: 13:00:17

Input Set : A:\249146us.app

Output Set: N:\CRF4\01142005\I889330.raw

3 <110> APPLICANT: KOLTERMAN, ORVILLE G.  
 4 YOUNG, ANDREW A.  
 6 <120> TITLE OF INVENTION: NOVEL EXENDIN AGONIST FORMULATIONS AND METHODS OF  
 ADMINISTRATION

7 THEREOF

9 &lt;130&gt; FILE REFERENCE: 249/146US

11 &lt;140&gt; CURRENT APPLICATION NUMBER: 09/889,330

12 &lt;141&gt; CURRENT FILING DATE: 2001-12-27

14 &lt;150&gt; PRIOR APPLICATION NUMBER: PCT/US00/00902

15 &lt;151&gt; PRIOR FILING DATE: 2000-01-14

17 &lt;150&gt; PRIOR APPLICATION NUMBER: US 60/116,380

18 &lt;151&gt; PRIOR FILING DATE: 1999-01-14

20 &lt;150&gt; PRIOR APPLICATION NUMBER: US 60/175,365

21 &lt;151&gt; PRIOR FILING DATE: 2000-01-10

23 &lt;160&gt; NUMBER OF SEQ ID NOS: 189

25 &lt;170&gt; SOFTWARE: PatentIn Ver. 3.2

27 &lt;210&gt; SEQ ID NO: 1

28 &lt;211&gt; LENGTH: 39

29 &lt;212&gt; TYPE: PRT

30 &lt;213&gt; ORGANISM: Heloderma horridum

32 &lt;220&gt; FEATURE:

33 &lt;221&gt; NAME/KEY: MOD\_RES

34 &lt;222&gt; LOCATION: (39)

35 &lt;223&gt; OTHER INFORMATION: AMIDATION, Position 39 is Ser-NH2

37 &lt;400&gt; SEQUENCE: 1

38 His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu

39 1 5 10 15

41 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser

42 20 25 30

44 Ser Gly Ala Pro Pro Pro Ser

45 35

48 &lt;210&gt; SEQ ID NO: 2

49 &lt;211&gt; LENGTH: 39

50 &lt;212&gt; TYPE: PRT

51 &lt;213&gt; ORGANISM: Heloderma suspectum

53 &lt;220&gt; FEATURE:

54 &lt;221&gt; NAME/KEY: MOD\_RES

55 &lt;222&gt; LOCATION: (39)

56 &lt;223&gt; OTHER INFORMATION: AMIDATION, Position 39 is Ser-NH2

58 &lt;400&gt; SEQUENCE: 2

59 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu

60 1 5 10 15

62 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser

63 20 25 30

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Input Set : A:\249146us.app

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65 Ser Gly Ala Pro Pro Pro Ser  
66 35  
69 <210> SEQ ID NO: 3  
70 <211> LENGTH: 39  
71 <212> TYPE: PRT  
72 <213> ORGANISM: Artificial Sequence  
74 <220> FEATURE:  
75 <223> OTHER INFORMATION: synthetic construct  
77 <220> FEATURE:  
78 <221> NAME/KEY: VARIANT  
79 <222> LOCATION: (1)  
80 <223> OTHER INFORMATION: His, Arg or Thr  
82 <220> FEATURE:  
83 <221> NAME/KEY: VARIANT  
84 <222> LOCATION: (2)  
85 <223> OTHER INFORMATION: Ser, Gly, Ala or Thr  
87 <220> FEATURE:  
88 <221> NAME/KEY: VARIANT  
89 <222> LOCATION: (3)  
90 <223> OTHER INFORMATION: Asp or Glu  
92 <220> FEATURE:  
93 <221> NAME/KEY: VARIANT  
94 <222> LOCATION: (6)  
95 <223> OTHER INFORMATION: Phe, Tyr or naphthalanine  
97 <220> FEATURE:  
98 <221> NAME/KEY: VARIANT  
99 <222> LOCATION: (7)  
100 <223> OTHER INFORMATION: Thr or Ser  
102 <220> FEATURE:  
103 <221> NAME/KEY: VARIANT  
104 <222> LOCATION: (8)  
105 <223> OTHER INFORMATION: Ser or Thr  
107 <220> FEATURE:  
108 <221> NAME/KEY: VARIANT  
109 <222> LOCATION: (9)  
110 <223> OTHER INFORMATION: Asp or Glu  
112 <220> FEATURE:  
113 <221> NAME/KEY: VARIANT  
114 <222> LOCATION: (10)  
115 <223> OTHER INFORMATION: Leu, Ile, Val, pentylglycine or Met  
117 <220> FEATURE:  
118 <221> NAME/KEY: VARIANT  
119 <222> LOCATION: (14)  
120 <223> OTHER INFORMATION: Leu, Ile, pentylglycine, Val or Met  
122 <220> FEATURE:  
123 <221> NAME/KEY: VARIANT  
124 <222> LOCATION: (22)  
125 <223> OTHER INFORMATION: Phe, Tyr or naphthalanine  
127 <220> FEATURE:

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```

128 <221> NAME/KEY: VARIANT
129 <222> LOCATION: (23)
130 <223> OTHER INFORMATION: Ile, Val, Leu, pentylglycine, tert-butylglycine or Met
132 <220> FEATURE:
133 <221> NAME/KEY: VARIANT
134 <222> LOCATION: (24)
135 <223> OTHER INFORMATION: Glu or Asp
137 <220> FEATURE:
138 <221> NAME/KEY: VARIANT
139 <222> LOCATION: (25)
140 <223> OTHER INFORMATION: Trp, Phe, Tyr or naphthylalanine
142 <220> FEATURE:
143 <221> NAME/KEY: VARIANT
144 <222> LOCATION: (31)
145 <223> OTHER INFORMATION: independently Pro, homoproline, 3-hydroxyproline,
146     4-hydroxyproline, thioproline, N-alkylglycine,
147     N-alkylpentylglycine or N-alkylalanine
149 <220> FEATURE:
150 <221> NAME/KEY: VARIANT
151 <222> LOCATION: (36)..(38)
152 <223> OTHER INFORMATION: independently Pro, homoproline, 3-hydroxyproline,
153     4-hydroxyproline, thioproline, N-alkylglycine,
154     N-alkylpentylglycine or N-alkylalanine
156 <220> FEATURE:
157 <221> NAME/KEY: VARIANT
158 <222> LOCATION: (39)
159 <223> OTHER INFORMATION: Ser, Thr or Tyr
161 <220> FEATURE:
162 <223> OTHER INFORMATION: c-term is -OH or NH2, with the proviso that the compound
163     does not have the formula of either SEQ ID NOS 1 or 2
165 <400> SEQUENCE: 3
W--> 166 Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa Ser Lys Gln Xaa Glu Glu
      167   1           5           10           15
      169 Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Leu Lys Asn Gly Gly Xaa Ser
      170           20           25           30
      172 Ser Gly Ala Xaa Xaa Xaa Xaa
      173           35
      175 <210> SEQ ID NO: 4
      176 <211> LENGTH: 38
      177 <212> TYPE: PRT
      178 <213> ORGANISM: Artificial Sequence
      180 <220> FEATURE:
      181 <223> OTHER INFORMATION: synthetic construct
      183 <220> FEATURE:
      184 <221> NAME/KEY: VARIANT
      185 <222> LOCATION: (1)
      186 <223> OTHER INFORMATION: His, Arg, or Tyr
      188 <220> FEATURE:
      189 <221> NAME/KEY: VARIANT

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Input Set : A:\249146us.app

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190 <222> LOCATION: (2)  
191 <223> OTHER INFORMATION: Ser, Gly, Ala or Thr  
193 <220> FEATURE:  
194 <221> NAME/KEY: VARIANT  
195 <222> LOCATION: (3)  
196 <223> OTHER INFORMATION: Asp or Glu  
198 <220> FEATURE:  
199 <221> NAME/KEY: VARIANT  
200 <222> LOCATION: (5)  
201 <223> OTHER INFORMATION: Ala or Thr  
203 <220> FEATURE:  
204 <221> NAME/KEY: VARIANT  
205 <222> LOCATION: (6)  
206 <223> OTHER INFORMATION: Ala, Phe, Tyr or naphthylalanine  
208 <220> FEATURE:  
209 <221> NAME/KEY: VARIANT  
210 <222> LOCATION: (7)  
211 <223> OTHER INFORMATION: Thr or Ser  
213 <220> FEATURE:  
214 <221> NAME/KEY: VARIANT  
215 <222> LOCATION: (8)  
216 <223> OTHER INFORMATION: Ala, Ser or Thr  
218 <220> FEATURE:  
219 <221> NAME/KEY: VARIANT  
220 <222> LOCATION: (9)  
221 <223> OTHER INFORMATION: Asp or Glu  
223 <220> FEATURE:  
224 <221> NAME/KEY: VARIANT  
225 <222> LOCATION: (10)  
226 <223> OTHER INFORMATION: Ala, Leu, Ile, Val, pentylglycine or Met  
228 <220> FEATURE:  
229 <221> NAME/KEY: VARIANT  
230 <222> LOCATION: (11)  
231 <223> OTHER INFORMATION: Ala or Ser  
233 <220> FEATURE:  
234 <221> NAME/KEY: VARIANT  
235 <222> LOCATION: (12)  
236 <223> OTHER INFORMATION: Ala or Lys  
238 <220> FEATURE:  
239 <221> NAME/KEY: VARIANT  
240 <222> LOCATION: (13)  
241 <223> OTHER INFORMATION: Ala or Gln  
243 <220> FEATURE:  
244 <221> NAME/KEY: VARIANT  
245 <222> LOCATION: (14)  
246 <223> OTHER INFORMATION: Ala, Leu, Ile, pentylglycine, Val or Met  
248 <220> FEATURE:  
249 <221> NAME/KEY: VARIANT  
250 <222> LOCATION: (15) .. (17)

## RAW SEQUENCE LISTING

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Input Set : A:\249146us.app

Output Set: N:\CRF4\01142005\I889330.raw

251 <223> OTHER INFORMATION: Ala or Glu  
253 <220> FEATURE:  
254 <221> NAME/KEY: VARIANT  
255 <222> LOCATION: (19)  
256 <223> OTHER INFORMATION: Ala or Val  
258 <220> FEATURE:  
259 <221> NAME/KEY: VARIANT  
260 <222> LOCATION: (20)  
261 <223> OTHER INFORMATION: Ala or Arg  
263 <220> FEATURE:  
264 <221> NAME/KEY: VARIANT  
265 <222> LOCATION: (21)  
266 <223> OTHER INFORMATION: Ala or Leu  
268 <220> FEATURE:  
269 <221> NAME/KEY: VARIANT  
270 <222> LOCATION: (22)  
271 <223> OTHER INFORMATION: Ala, Phe, Tyr or naphthylalanine  
273 <220> FEATURE:  
274 <221> NAME/KEY: VARIANT  
275 <222> LOCATION: (23)  
276 <223> OTHER INFORMATION: Ile, Val, Leu, pentylglycine, tert-butylglycine or Met  
278 <220> FEATURE:  
279 <221> NAME/KEY: VARIANT  
280 <222> LOCATION: (24)  
281 <223> OTHER INFORMATION: Ala, Glu or Asp  
283 <220> FEATURE:  
284 <221> NAME/KEY: VARIANT  
285 <222> LOCATION: (25)  
286 <223> OTHER INFORMATION: Ala, Trp, Phe, Tyr or naphthylalanine  
288 <220> FEATURE:  
289 <221> NAME/KEY: VARIANT  
290 <222> LOCATION: (26)  
291 <223> OTHER INFORMATION: Ala or Leu  
293 <220> FEATURE:  
294 <221> NAME/KEY: VARIANT  
295 <222> LOCATION: (27)  
296 <223> OTHER INFORMATION: Ala or Lys  
298 <220> FEATURE:  
299 <221> NAME/KEY: VARIANT  
300 <222> LOCATION: (28)  
301 <223> OTHER INFORMATION: Ala or Asn  
303 <220> FEATURE:  
304 <221> NAME/KEY: MOD\_RES  
305 <222> LOCATION: (31)  
306 <223> OTHER INFORMATION: Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,  
307 N-alkylpentylglycine or N-alkylalanine  
309 <220> FEATURE:  
310 <221> NAME/KEY: MOD\_RES  
311 <222> LOCATION: (36)..(38)

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/889,330DATE: 01/14/2005  
TIME: 13:00:18Input Set : A:\249146us.app  
Output Set: N:\CRF4\01142005\I889330.rawPlease Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. ~~1,2,3,5,7,8,9,10,14,22,23,24,25,31,36,37,38,39~~  
Seq#:4; Xaa Pos. ~~1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23,24~~  
Seq#:4; Xaa Pos. ~~25,26,27,28,31,36,37,38~~  
Seq#:5; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23  
Seq#:5; Xaa Pos. 24,25,26,27,28,31,36,37,38,39  
Seq#:15; Xaa Pos. 6  
Seq#:20; Xaa Pos. 10  
Seq#:21; Xaa Pos. 10  
Seq#:22; Xaa Pos. 14  
Seq#:23; Xaa Pos. 14  
Seq#:24; Xaa Pos. 22  
Seq#:27; Xaa Pos. 23  
Seq#:28; Xaa Pos. 23  
Seq#:31; Xaa Pos. 31,36,37,38  
Seq#:32; Xaa Pos. 36,37,38  
Seq#:33; Xaa Pos. 31,36,37,38  
Seq#:34; Xaa Pos. 36,37,38  
Seq#:35; Xaa Pos. 31,36,37,38  
Seq#:36; Xaa Pos. 31,36,37,38  
Seq#:37; Xaa Pos. 31,36,37,38  
Seq#:38; Xaa Pos. 36,37,38  
Seq#:39; Xaa Pos. 31,36,37,38  
Seq#:81; Xaa Pos. 31,36,37,38  
Seq#:82; Xaa Pos. 36,37,38  
Seq#:83; Xaa Pos. 31  
Seq#:84; Xaa Pos. 31,36,37  
Seq#:85; Xaa Pos. 31,36,37  
Seq#:86; Xaa Pos. 31,36  
Seq#:89; Xaa Pos. 6  
Seq#:93; Xaa Pos. 10  
Seq#:94; Xaa Pos. 22  
Seq#:95; Xaa Pos. 23  
Seq#:99; Xaa Pos. 31,36,37  
Seq#:115; Xaa Pos. 6  
Seq#:116; Xaa Pos. 6  
Seq#:127; Xaa Pos. 10  
Seq#:128; Xaa Pos. 10  
Seq#:137; Xaa Pos. 14  
Seq#:138; Xaa Pos. 14  
Seq#:151; Xaa Pos. 22  
Seq#:152; Xaa Pos. 22  
Seq#:155; Xaa Pos. 23  
Seq#:156; Xaa Pos. 23  
Seq#:181; Xaa Pos. 31,36,37,38

**RAW SEQUENCE LISTING ERROR SUMMARY**

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Input Set : A:\249146us.app

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Seq#:182; Xaa Pos. 36,37,38

Seq#:183; Xaa Pos. 31,36,37

Seq#:184; Xaa Pos. 31,36

**Invalid Line Length:**

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:5; Line(s) 484



## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/889,330

DATE: 01/14/2005

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Input Set : A:\249146us.app

Output Set: N:\CRF4\01142005\I889330.raw

L:166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
M:341 Repeated in SeqNo=3  
L:320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
M:341 Repeated in SeqNo=4  
L:481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
M:341 Repeated in SeqNo=5  
L:711 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:836 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0  
L:865 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0  
L:894 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0  
L:923 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0  
L:955 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:16  
L:1032 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:16  
L:1061 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:16  
L:1143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:16  
M:341 Repeated in SeqNo=31  
L:1175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:32  
L:1206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:16  
M:341 Repeated in SeqNo=33  
L:1238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:32  
L:1269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:16  
M:341 Repeated in SeqNo=35  
L:1303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:16  
M:341 Repeated in SeqNo=36  
L:1337 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:16  
M:341 Repeated in SeqNo=37  
L:1369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:32  
L:1400 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:16  
M:341 Repeated in SeqNo=39  
L:2331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:16  
M:341 Repeated in SeqNo=81  
L:2363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:32  
L:2389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:16  
L:2423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84 after pos.:16  
M:341 Repeated in SeqNo=84  
L:2457 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:85 after pos.:16  
M:341 Repeated in SeqNo=85  
L:2491 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86 after pos.:16  
M:341 Repeated in SeqNo=86  
L:2562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:0  
L:2651 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:0  
L:2680 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:16  
L:2706 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:16  
L:2803 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:16  
M:341 Repeated in SeqNo=99  
L:3144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:115 after pos.:0  
L:3170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:116 after pos.:0  
L:3406 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127 after pos.:0

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L:3432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:128 after pos.:0

L:3626 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:137 after pos.:0